



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,286	02/06/2004	Kerwin D. Dobbs	UC0405USCIP	8498

23906 7590 06/15/2006

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
BARLEY MILL PLAZA 25/1128
4417 LANCASTER PIKE
WILMINGTON, DE 19805

EXAMINER

YAMNITZKY, MARIE ROSE

ART UNIT	PAPER NUMBER
----------	--------------

1774

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/774,286	Applicant(s) DOBBS ET AL.	
	Examiner Marie R. Yamnitzky	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/06/04, 06/30/04, 08/12/05 & 11/10/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>rec'd 06/30/04, 08/12/05 and 11/10/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1774

1. The present application is filed as a CIP of 10/366,295, filed February 13, 2003, and a CIP of an application identified by docket number and filing date. Based on the docket number and filing date, the examiner expects that the related application is Application No. 10/768,298, now abandoned. Verification is required.

The examiner notes that while 10/366,295 is a continuation of 09/879,014, which claimed priority of two provisional applications, the present application does not claim priority of 09/879,014 and the provisional applications.

2. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim 9 recitation that “adjacent R⁵ can be joined...” is confusing because the two R⁵ groups are not adjacent to each other.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 1774

4. Claims 1-3 and 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Petrov et al. (WO 02/02714 A2).

See the whole document, especially pages 1-7, 11 and 12. In particular, see compound 1-s as defined in Table 1.

Petrov et al. disclose iridium compounds for use in electronic devices. Petrov's Compound 1-s is a compound having present Formula I wherein $m = 3$, $y = 0$, $z = 0$ and each of R^1 , R^2 and $R^3 = H$. Compound 1-s meets the limitations of the compound required for the organic electronic device of present claims 1-3 and 12-14, and meets the limitations of the compound claimed in present claims 15 and 16. With respect to the limitations of present claims 12-14, see page 12, lines 4-30, of the prior art.

5. Claims 1-4, 8 and 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Ise et al. (EP 1 175 128 A2).

See the whole document. In particular, see formulae (K-3), (K-6), (K-9), (K-10), (K-11), (K-15), (K-19) and (K-25) on pages 82-84, and Examples 7, 8 and 10 on page 91.

Each of the specific iridium compounds represented by the formulae referenced above meets the limitations of a compound having Formula I as defined in present claims 1 and 15, and further defined in present claims 2 and 16.

The compounds of formulae (K-3), (K-6), (K-11) and (K-25) further meet the limitations of the compound required by present claim 3.

The compounds of formulae (K-9), (K-10), (K-15) and (K-19) further meets the limitations of the compound required by present claims 4 and 8.

The light emitting elements of Ise's Examples 7, 8 and 10, which utilize the compound of formula (K-3), meet the limitations of the device as further defined in present claims 12-14. Any of Ise's iridium compounds of the formulae referenced above can be used for the same purpose as (K-3).

6. Claims 1, 2, 4, 7 and 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Igarashi (US 2002/0134984 A1).

The examiner considers the effective filing date with respect to compounds of present formula (I) wherein $R^1 = N(R^4)_2$ to be January 30, 2004. The earlier priority application, 10/366,295, does not explicitly disclose $N(R^4)_2$ as a substituent for the phenylpyridine ligand.

The examiner considers the effective filing date with respect to compounds of present formula (I) wherein $m = 1$ and $y = 2$ to be January 30, 2004. The earlier priority application, 10/366,295, requires at least two phenylpyridine ligands having at least one fluorine or fluorinated group. Compounds having only one phenylpyridine ligand, as when $m = 1$ in present formula (I), are not disclosed in the '295 application.

Igarashi discloses iridium compounds represented by present Formula I wherein R^1 is $N(R^4)_2$ wherein R^4 is an alkyl group, each of R^2 and R^3 is H, m is 2, y is 1 and L' is a monoanionic bidentate ligand that has a coordinating group within the scope of present claim 7.

Art Unit: 1774

See (1-331), (1-332), (1-333) and (1-345) on pages 31 and 33. These compounds meet the limitations of the compound required by present claims 1, 2, 4, 7 and 12-16.

Igarashi discloses an iridium compound represented by present Formula I wherein R^1 is OR^4 wherein R^4 is an alkyl group, each of R^2 and R^3 is H, m is 1, y is 2 and L' is a monoanionic bidentate ligand. See (1-339) on page 32. This compound meets the limitations of the compound required by present claims 1, 2 and 12-16.

Igarashi's compounds are disclosed for use in the light-emitting layer of an electronic device (e.g. see paragraphs [0075]-[0076]).

7. Claims 1, 2, 4, 7 and 12-16 are rejected under 35 U.S.C. 102(b) or 102(e) as being anticipated by Igarashi (US 2002/0134984 A1).

Compounds of present formula (I) wherein $m = 2$ or 3 , $R^1 = H$, R^4 or OR^4 wherein R^4 is alkyl, $R^2 = H$, C_nF_{2n+1} or CN, and $R^3 = H$, C_nF_{2n+1} or CN are partially supported by the earliest priority application, 10/366,295, which teaches that the substituted phenylpyridine ligands having at least one fluorine or fluorinated group as a substituent may also have one or more substituents selected from "conventional substituents...such as alkyl, alkoxy...and cyano groups". However, the '295 application does not disclose any specific examples of compounds within the scope of the present claims wherein R^1 is an alkyl or alkoxy group (i.e. wherein $R^1 = R^4$ or OR^4 wherein R^4 is alkyl). The priority application filed January 30, 2004 provides specific examples of such compounds.

Art Unit: 1774

Igarashi discloses iridium compounds represented by present Formula I wherein R^1 is R^4 or OR^4 wherein R^4 is an alkyl group, each of R^2 and R^3 is H, m is 2, y is 1 and L' is a monoanionic bidentate ligand that has a coordinating group within the scope of present claim 7. See (1-208), (1-301) through (1-305), (1-308), (1-312) through (1-315), (1-318), (1-323) through (1-330), (1-334) through (1-338), (1-344), (1-346), (1-347), (1-349) and (1-360) on pages 21-34. These compounds meet the limitations of the compound required by present claims 1, 2, 4, 7 and 12-16.

These compounds are disclosed for use in the light-emitting layer of an electronic device (e.g. see paragraphs [0075]-[0076]).

Since the '295 priority application does not provide full support for compounds defined by present formula I which are met by the above identified compounds of Igarashi, it is the examiner's position that Igarashi's disclosure is available as prior art under 35 U.S.C. 102(b). In the event that applicant persuades the examiner that the '295 application provides sufficient support for the compounds defined by formula I which are met by the above identified compounds of Igarashi, Igarashi's disclosure still represents prior art under 35 U.S.C. 102(e).

8. Claims 1, 2, 4, 7, 8 and 10-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Grushin et al. (US 6,919,139 B2).

Grushin et al. disclose iridium compounds represented by present formula 1 wherein R^1 is H or R^4 wherein R^4 is an alkyl group, each of R^2 and R^3 is H, m is 2, y is 1, and L' is a monoanionic bidentate ligand within the scope of present claims 7, 8, 10 and 11. Grushin et al.

disclose these compounds for use in an electronic device. For example, see Figs. 1A, 1B, 2A, 2B, 3 and 4, column 1, line 66-c. 2, l. 22, c. 6, l. 16-24, c. 6, l. 57-c. 8, l. 4 and the claims.

Compounds 2-a, 2-b, 2-c, 2-d, 2-k, 2-n and 2-u meet the limitations of the compound required by present claims 1, 2, 4, 7, 8, 10 and 12-16. Compounds 2-a, 2-c and 2-k further meet the limitations of the compound required by present claim 11; the PO-1 ligand of these compounds is a ligand represented by present formula VII.

9. Claims 1, 2, 5, 6 and 12-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Herron et al. (US 2005/0048312 A1).

The examiner considers the effective filing date with respect to compounds of present formula (I) wherein $m = 1$ and $y = 2$, or wherein $m = 1$, $y = 1$ and $z = 2$, or wherein $m = 1$ and $z = 4$, to be January 30, 2004. The earlier priority application, 10/366,295, requires at least two phenylpyridine ligands having at least one fluorine or fluorinated group. Compounds having only one phenylpyridine ligand, as when $m = 1$ in present formula (I), are not disclosed in the '295 application.

Herron et al. disclose iridium compounds represented by present formula I wherein R^1 is R^4 wherein R^4 is an alkyl group, each of R^2 and R^3 is H, m is 1, y is 0 and z is 4. For example, see Figures 3, 4, 7 and 9. These compounds meet the limitations of the compound required by present claims 1, 2, and 12-16.

Herron et al. disclose iridium compounds represented by present formula I wherein R^1 is R^4 wherein R^4 is an alkyl group, each of R^2 and R^3 is H, m is 1, y is 1 and z is 2. For example,

see Figures 5 and 8. These compounds meet the limitations of the compound required by present claims 1, 2, 5 and 12-16. The compound represented by the formula in Figure 5 further meets the limitations of present claim 6, having one hydride ligand.

Herron et al. disclose these compounds for use in an electronic device. With respect to the limitations of present claims 12-14, see paragraphs [0045]-[0052] for example.

10. Claims 1-4, 7, 8 and 12-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Ma et al. (US 6,916,554 B2) or Thompson et al. (US 7,011,897 B2).

See the entire patent to Ma et al. In particular, see column 2, lines 41-67, c. 9, l. 4-c. 12, l. 30, Table 1 (c. 18) and the claims.

Ma et al. disclose emissive materials for use in the emissive layer (active layer) of an organic light emitting device (an electronic device). The emissive layer may comprise components in addition to the emissive material. The emissive materials are metal compounds having at least one ligand of present Formula IV. The metal may be iridium. For example, see c. 9, l. 30-50. All ligands may be phenylpyridine ligands having two fluorine substituents at the positions required by present formula I. Alternatively, the metal compounds may have at least one such fluorine-substituted phenylpyridine ligand and one or more ancillary ligands wherein the ancillary ligand(s) may be a bidentate ligand such as a β -enolate ligand (e.g. acac or t-butylacac; see c. 11, l. 14), or monodentate ligands.

Compounds 10-12 as defined in Table 1 of the Ma patent meet the limitations of the compound required by present claims 1, 2 and 12-16. Compound 11 further meets the

limitations of the compound required by present claim 3. Compounds 10 and 12 further meet the limitations of the compound required by present claims 4, 7 and 8.

See the entire patent to Thompson et al. In particular, see column 3, line 27-c. 4, l. 57, c. 13, l. 3-c. 16, l. 49, Table 1 (c. 27-30) and the claims.

Thompson et al. disclose emissive materials for use in the emissive layer (active layer) of an organic light emitting device (an electronic device). The emissive layer may comprise components in addition to the emissive material. The emissive materials are metal compounds having at least one ligand of present Formula IV. The metal may be iridium. For example, see c. 13, l. 30-51. All ligands may be phenylpyridine ligands having two fluorine substituents at the positions required by present formula I. Alternatively, the metal compounds may have at least one such fluorine-substituted phenylpyridine ligand and one or more ancillary ligands wherein the ancillary ligand(s) may be a bidentate ligand such as a β -enolate ligand (e.g. acac or t-butylacac; see c. 15, l. 19-46), or monodentate ligands.

The compounds used in Examples 3, 4, 13 and 17 of the Thompson patent meet the limitations of the compound required by present claims 1, 2, 4, 7, 8 and 12-16.

11. Claims 1-4, 7, 8, 12-16 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Kamatani et al. (US 6,953,628 B2).

See the whole patent. In particular, see column 5, line 18-c. 6, l. 25, c. 11, l. 24-c. 13, l. 50, Nos. 242 and 274 in Table 1-5 (c. 21-24), Nos. 387 and 396 in Table 1-7 (c. 27-28), and Nos. 612 and 616 in Table 1-11 (c. 33-34). Each of these prior art compounds meets the limitations of

the compound required by present claims 1, 2 and 12-16. Compounds Nos. 242, 274, 387 and 396 further meet the limitations of present claim 3. Compound Nos. 612 and 616 further meet the limitations of present claims 4, 7 and 8. Compound Nos. 387 and 612 are derived from the compound of present claim 19.

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-4, 7, 8, 12-16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petrov et al. (WO 02/02714 A2) as applied to claims 1-3 and 12-16 above, and for the further reasons set forth below.

Petrov et al. disclose a specific example of an iridium compound as defined in present independent claims 1 and 15 having three fluorine-substituted phenylpyridine ligands. Petrov's iridium compounds are not limited to compounds having three fluorine-substituted phenylpyridine ligands, but require at least two such ligands (e.g. see page 2, lines 2-4).

Petrov et al. teach that in addition to two substituted phenylpyridine ligands, the iridium compounds may comprise a bidentate ligand such as ethylene diamine (which meets the limitations of L' as defined in present claims 1, 4, 7 and 15) or acetylacetonate (which meets the

limitations of L' defined in present claims 1, 4, 8 and 15, and is the third ligand of the compound of Formula XIII shown in present claim 18).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to make other iridium compounds suggested by Petrov et al. with the expectation that such compounds would be suitable for the purposes taught in the prior art. One of ordinary skill in the art at the time of the invention would have reasonably expected that compounds having two substituted phenylpyridine ligands of the structure defined with respect to Compound 1-s, and having a third monoanionic bidentate ligand such as ethylenediamine or acetylacetonate, would be suitable for the purposes taught in the prior art given Petrov's explicit teachings that the iridium compounds may comprise an ethylenediamine or acetylacetonate ligand instead of a third substituted phenylpyridine ligand.

Petrov et al. do not disclose a specific example of a compound having two fluorine substituents and a trifluoromethyl ($-\text{CF}_3$) group as within the scope of present independent claims 1 and 15, and as required for the compound of formula XIII in present claim 18 and the compound of formula VIII in present claim 19, but Petrov's compounds may have at least one trifluoromethyl group as a substituent. Petrov's Compound 1-f is a compound having a phenylpyridine ligand that is substituted with a trifluoromethyl group at the position corresponding to present R^2 , but lacking the two fluorine substituents required by the present claims.

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to make other iridium compounds similar to those disclosed by Petrov et al. with

the expectation that compounds that are similar in structure would have similar properties and could be used for the same purpose. One of ordinary skill in the art at the time of the invention, having knowledge of Petrov's disclosure and particularly of Petrov's compounds 1-f and 1-s, would have reasonably expected compounds according to present formula (I) wherein R^2 is CF_3 , such as the iridium compound of present formula XIII, to be suitable for use in an electronic device, with the compound of present formula VIII being useful as a starting material for the synthesis of such an iridium compound.

14. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ise et al. (EP 1 175 128 A2) as applied to claims 1-4, 8 and 12-16 above, and further in view of Igarashi et al. (US 2001/0019782 A1).

Ise's compounds of formulae (K-9), (K-10), (K-15) and (K-19) are similar to the compound required by present claim 9, with the exception that the prior art compounds have hydrogen at the position corresponding to R^6 in present formula III.

Igarashi et al. disclose iridium compounds to be used in a light-emitting device similar to those disclosed by Ise et al. Based on the β -enolate structure disclosed with reference to formula (23) in Igarashi's published application (e.g. see paragraphs [0114] and [0117]), one of ordinary skill in the art at the time of the invention would have reasonably expected that a β -enolate ligand having a substituent (i.e. something other than hydrogen) at the position corresponding to present R^6 could be used in place of a β -enolate ligand having hydrogen at R^6 . It would have been an obvious modification to one of ordinary skill in the art at the time of the invention,

having knowledge of Igarashi's disclosure, to make compounds similar to Ise's compounds of formulae (K-9), (K-10), (K-15) and (K-19) having other substituted β -enolate ligands that would reasonably be expected to be useful for the same purpose as the β -enolate ligands of Ise's compounds.

15. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ma et al. (US 6,916,554 B2) or Thompson et al. (US 7,011,897 B2) as applied to claims 1-4, 7, 8 and 12-16 above, and for the further reasons set forth below.

Neither prior art reference explicitly discloses the compounds of present claim 17 or 19, though such compounds provide ligands within the scope of the substituted phenylpyridine ligands required by the prior art references. Likewise, neither prior art reference discloses the iridium compounds of present claim 18 though such compounds are within the scope of the prior art and the compound of formula XIII in claim 18 is particularly suggested by the prior art teachings.

Absent a showing of superior/unexpected results provided by a particular substituted phenylpyridine ligand and/or a particular combination of substituted phenylpyridine ligand and ancillary ligand(s), it is the examiner's position that it would have been within the level of ordinary skill of a worker in the art, guided by the teachings of Ma et al. or Thompson et al., to determine suitable combinations of substituents for the phenylpyridine ligand and suitable combinations of substituted phenylpyridine ligand and ancillary ligand(s). For example, regarding compounds wherein R^2 is CF_3 such as in the compounds of formula IX and XII of

present claim 17, XIII of present claim 18, and VIII of present claim 19, CF_3 meets the Hammett value limitation required for the substituent at the corresponding R_3 position of Ma's compounds, and CF_3 is specifically disclosed as usable for the substituent at the corresponding position of Thompson's compounds. Regarding the NMe_2 substituent on the pyridine ring in present formulae IX and XII, a dialkylamino group at the corresponding position is taught as suitable for the R' substituent in the prior art compounds (e.g. see c. 10, l. 26-35 of the Ma patent and c. 14, l. 28-37 of the Thompson patent). Thompson et al. also disclose a specific example of an iridium compound having a phenylpyridine ligand with NMe_2 at the corresponding position (the compound used in Thompson's Example 13).

16. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamatani et al. (US 6,953,628 B2) as applied to claims 1-4, 7, 8, 12-16 and 19 above, and for the further reasons set forth below.

Kamatani et al. do not disclose a specific example of a compound of present claim 1 wherein L' is a β -enolate such as a β -enolate of formula III in present claim 9. Kamatani's compounds 612 and 616 are similar compounds wherein L' is an iminocarboxylate ligand. Kamatani et al. teach that β -enolate ligands such as those of formula III in present claim 9 can be used in place of the iminocarboxylate ligand (e.g. see formulae 4 and 5 in c. 5-6, which represent iminocarboxylate and β -enolate ligands, respectively). It would have been an obvious modification to one of ordinary skill in the art at the time of the invention to make compounds similar to compounds 612 and 616, but having a β -enolate ligand in place of the

Art Unit: 1774

iminocarboxylate ligand, with the expectation that compounds similar in structure and comprising ligands disclosed by Kamatani et al. would be suitable for the purposes of the prior art.

17. A rejection based on double patenting of the “same invention” type finds its support in the language of 35 U.S.C. 101 which states that “whoever invents or discovers any new and useful process ... may obtain a patent therefor ...” (Emphasis added). Thus, the term “same invention,” in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

18. Claim 18 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 15 of copending Application No. 11/315,741. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

19. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

Art Unit: 1774

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

20. Claims 1-17 and 19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 7-14 and 16 of copending Application No. 11/315,741. Although the conflicting claims are not identical, they are not patentably distinct from each other because there is substantial overlap between the subject matter of the present claims and the copending claims as follows:

The electronic device as claimed in present claim 1 is fully within the scope of the electronic device as claimed in copending claim 16, and the compound as claimed in present claim 15 is fully within the scope of the complex as claimed in copending claim 1. The copending claims have a slightly broader definition for some of the variables in Formula I. The definitions of variables as set forth in present claims 2-8, 11 and 16 are also set forth in copending claims 3 and 7-13, with the definition of L' as set forth in present claim 9 being a subset of the definition set forth in copending claim 12, and the definition of L' as set forth in present claim 10 being a subset of the definition set forth in copending claim 12 and generic for the definition set forth in copending claim 13.

The four compounds claimed in present claim 17 and the compound claimed in present claim 19 are claimed in copending claim 14. In addition to these five specific compounds, copending claim 14 also claims a compound defined by a formula that encompasses each of these five compounds.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

21. Claims 1, 2, 5, 6 and 12-16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 31 of copending Application No. 10/650,323. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compound of formula I as defined in present claims 1, 2, 15 and 16 is generic for compounds represented by five of the six formulae set forth in copending claim 31. The compound of formula I as required by present claim 5 encompasses compounds as represented by the second and fifth formulae in copending claim 31, and the compound of formula I as required by present claim 6 encompasses the compound represented by the second formula in copending claim 31. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the luminescent organometallic complex claimed in copending claim 31 as an emitting material in an electroluminescent device.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 1774

22. Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (571) 272-1531. The examiner works a flexible schedule but can generally be reached at this number from 6:30 a.m. to 4:00 p.m. Monday, Tuesday, Thursday and Friday, and every other Wednesday from 6:30 a.m. to 3:00 p.m.

The current fax number for all official faxes is (571) 273-8300. (Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (571) 273-1531.)

MRY
June 12, 2006



**MARIE YAMNITZKY
PRIMARY EXAMINER**

1774